IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Tor Jan Akerlund	§	
	§	Group Art Unit: 3672
Serial No.: 10/044,639	§	
Confirmation No.: 9370	§	Examiner: Jennifer Hawkins Gay
Filed: January 10, 2002	§	
	§	Customer No. 36735
For: APPARATUS FOR POSITIONING A TONG AND DRILLING RIG PROVIDED WITH SUCH AN APPARATUS	§	

MAIL STOP APPEAL BRIEF-PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

APPEAL BRIEF

Applicants submit this Appeal Brief to the Board of Patent Appeals and Interferences on appeal from the decision of the Examiner of Group Art Unit 3672 dated March 10, 2006, finally rejecting claims 1-24, 50-55, 57, 60, 61, 70-82, and 94-99. The final rejection of claims 1-24, 50-55, 57, 60, 61, 70-82, and 94-99 is appealed.

Please charge Deposit Account No. 20-0782/MRKS/0032.C1/WBP in the amount of $500.00 for filing this brief and any other fees necessary to make the filing of this Appeal Brief timely and acceptable to the Office.

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Real Party in Interest

The present application has been assigned to Weatherford/Lamb, Inc., 515 Post Oak Boulevard, Suite 600, Houston, Texas 77027.

Related Appeals and Interferences

Applicant asserts that no other appeals or interferences are known to the Applicant, the Applicant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

Status of Claims

Claims 1-24, 50-55, 57, 60, 61, 70-82, and 94-99 are pending in the application and stand finally rejected. Claims 25-49, 56, 58-59, 62-69, and 83-93 have been cancelled.

The final rejections of claims 1-24, 50-55, 57, 60, 61, 70-82, and 94-99 are appealed.

The pending claims are shown in the attached Claims Appendix.

Status of Amendments

All claim amendments have been entered by the Examiner. No amendments to the claims were proposed after the final rejection.

Summary of Claimed Subject Matter

Claimed embodiments of the invention (*see, e.g.,* Claim 1) provide an apparatus for positioning a tong proximate a tubular at a well center. *See, e.g.,* Figures 1 and 4, Item 100; ¶¶ 0020, 0026, and 0027. The apparatus includes an extendable structure, the tong attached to one end of the extendable structure. *See, e.g.,* Figures 1 and 4, Items 100, 101; ¶¶ 0021 and 0026. The apparatus also includes an actuating member for extending or retracting the extendable structure relative to the well center, the extendable structure and the actuating member having substantially parallel longitudinal axes. *See, e.g.,* Figures 1 and 2, Items 101, 103; ¶ 0021. The apparatus further includes a mounting assembly coupled to an opposite end of the extendable structure, wherein the mounting assembly includes a bearer and the bearer is coupled to a single location of a support member on a drilling tower. *See, e.g.,* Figures 1-3, Items 102 and 107; ¶¶ 0006, 0009, and 0022.

Claimed embodiments of the invention (*see, e.g.,* Claim 50) an apparatus for positioning a tong for making up or breaking out tubulars. *See, e.g.,* Figures 1 and 4, Item 100; ¶¶ 0020, 0026, and 0032. The apparatus includes an extendable structure, the extendable structure having a variable length and the tong capable of making up or breaking out tubulars attached to one end of the extendable structure. *See, e.g.,* Figures 1 and 4, Items 100, 101; ¶¶ 0021 and 0027. The apparatus further includes a motive assembly having an extendable member for changing the length of the extendable structure. *See, e.g.,* Figures 1 and 2, Items 101, 103; ¶ 0021. The apparatus further includes a mounting assembly for coupling the extendable structure to at most one location on a drilling tower. *See, e.g.,* Figures 1-3, Items 102 and 107; ¶¶ 0006, 0009, and 0024.

Claimed embodiments of the invention (*see, e.g.,* Claim 70) a method for connecting a first tubular to a second tubular proximate a well center. *See, e.g.,* Figures 1-3, ¶¶ 0026, 0027, and 0032. The method includes providing an apparatus for connecting the tubulars, wherein the apparatus includes a tong adapted to connect the

tubulars; an extendable structure for positioning the tong (*See, e.g.,* Figures 1 and 4, Items 100, 101; ¶¶ 0021 and 0026); an extendable actuating member for extending or retracting the extendable structure (*See, e.g.,* Figures 1 and 2, Items 101, 103; ¶ 0021); and a mounting assembly having a bearer adapted to couple the apparatus to a single location on a drilling tower (*See, e.g.,* Figures 1-3, Items 102 and 107; ¶¶ 0006, 0009, and 0022). The method also includes positioning the apparatus on a drilling tower and actuating the extendable structure to move the tong toward the well center. *See, e.g.,* ¶¶ 0024 and 0027. The method further includes engaging the first and second tubulars with the tong and connecting the first tubular to the second tubular. *See, e.g.,* ¶ 0032.

Claimed embodiments of the invention (*see, e.g.,* Claim 76) an apparatus for positioning a tong for making up or breaking out tubulars. *See, e.g.,* Figures 1 and 4, Item 100; ¶¶ 0020, 0026, and 0032. The apparatus includes an extendable structure, the extendable structure having a variable length and the tong for making up or breaking out tubulars attached to one end of the extendable structure. *See, e.g.,* Figures 1 and 4, Items 100, 101; ¶¶ 0021 and 0027. The apparatus also includes a motive assembly for changing the length of the extendable structure, the motive assembly and the extendable structure having substantially parallel axis. *See, e.g.,* Figures 1-3, Items 101, 103; ¶ 0021. The apparatus further includes a mounting assembly coupled to an opposite end of the extendable structure, wherein the mounting assembly is adapted to couple the extendable structure to a single location of a support beam disposed above a rig floor. *See, e.g.,* Figures 1-3, Items 102 and 107; ¶¶ 0006, 0009, and 0022.

Grounds of Rejection to be Reviewed on Appeal

1. Claims 1-5, 8-15, 18, 19, 21-24, 50-55, 57, 60, 61, 70-82, and 94-99 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *McArthur*, U.S. Patent No. 4,652,195 in view of *Kelly*, U.S. Patent No. *3,881,375.*

2. Claims 6, 7, 16, 17, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatetable over *McArthur* in view of *Kelly* as applied to claims 5 and 15 above, and further in view of *Swoboda, Jr.,* U.S. Patent No. 3,840,128.

ARGUMENTS

I. The Examiner erred in rejecting claims 1-5, 8-15, 18, 19, 21-24, 50-55, 57, 60, 61, 70-82, and 94-99 under 35 USC § 103(a) as being unpatentable over *McArthur*, U.S. Patent No. 4,652,195 in view of *Kelly*, U.S. Patent No. 3,881,375.

Claims 1-5, 8-15, 18, 19, 21-24, 50-55, 57, 60, 61, 70-82, and 94-99 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *McArthur* in view of *Kelly*. With respect to the independent claims, the Examiner states *McArthur* discloses an apparatus for positioning a wellbore tool for moving tubing joints, which discloses all of the limitations of the above claim except for the tool being a tong capable of making up or breaking out tubulars. The Examiner further states *Kelly* discloses a movable wellbore tool that is a tong capable of making up or breaking out tubulars. The Examiner concludes that it would have been obvious to modify the apparatus of *McArthur* such that the tool was a tool as taught by *Kelly* in order to have eliminated the need for an operator to perform the separate step of making up or breaking out the tubular once they are put into position.

Applicant respectfully traverses this rejection. The Federal Circuit recently reemphasized that the U.S. Patent and Trademark Office bears the burden of establishing a case of *prima facie* obviousness. *In Re Kahn,* 441 F.3d 977, 986, 78 U.S.P.Q.2d 1329 (Fed. Cir. 2006). To establish a prima facie case of obviousness based on a combination of elements disclosed in the prior art, the Examiner must articulate the basis on which it concludes that it would have been obvious to make the claimed invention. *Id.* Mere identification in the prior art of each element is insufficient to defeat the patentability of the combined subject matter as a whole. *Id.* The Examiner has failed to establish a prima facie case of obviousness.

The tong assembly of *Kelly* and the stabbing apparatus of *McArthur* are designed to perform two different steps in the tubular makeup/breakout process, *i.e.*, (1) stabbing

step and (2) rotating the tubular for connection step. *Kelly* discloses hoisting apparatus with a tong assembly to perform the connection step. The hoisting apparatus supports the tong assembly T on a vertical column 10 having a base support 14. Column 2, lns. 51-55. The tong assembly is connected to a tong support yoke structure 24, which projects horizontally from the vertical column 10. Column 3, lns. 3-5. The yoke structure 24 is not extendable. Bearing means are provided to allow pivotal movement of the vertical column 10 about a vertical axis such that the tong assembly can be swung to and from a position aligned with the well bore. Column 2, lns. 55-59. In operation, the tong is lowered to a location affording clearance for the pipe supporting elevator until the pipe in the well bore is supported by the usual slip mechanism and the elevator is released. Column 3, lns. 36-40. A next stand of pipe is then stabbed into the upper end of the pipe string and the tong assembly T is elevated to a location at which the respective tongs are engageable with the tool joints. Column 3, lns. 40-44.

McArthur discloses a casing stabbing apparatus to perform the stabbing step. The stabbing apparatus is positioned on a derrick for engaging a median portion of a suspended casing. The stabbing apparatus is used to guide the casing into alignment with the casing in the wellbore. The stabbing apparatus cannot make up or break out the casings. In fact, the casings are made up in a separate step using a different piece of equipment. (Col. 6, lns. 52-59). Referring to Figure 1, an operator is shown standing on the rig floor using a wrenching apparatus to make up the casings. This wrenching apparatus on the rig floor has a similar function to the tong assembly of *Kelly*. Additionally, both the wrenching apparatus and the tong assembly are located on the rig floor. Neither reference discloses putting a tong on the drilling tower to connect tubulars. During connection of the tubulars, the stabbing apparatus stabilizes the top portion of the pipe while the wrenching apparatus is used to make up or break out th pipes. Thus, the apparatus of each reference may be used at the same time for different parts of the same operation. They can't be at two locations at the same time. Therefore, there is no motivation or suggestion to put the tong assembly of *McArthur* at the end of the stabbing apparatus of *Kelly* up on the drilling tower.

The motivation to combine the references asserted by the Examiner is that modification of the *McArthur* tool with the tong of *Kelly* would have "eliminated the need for an operator to perform the separate step of making up or breaking out the tubulars once they are put into position." The Examiner's asserted motivation is flawed. In fact, the asserted modification would still require a separate step. As discussed above, the tong assembly of *Kelly* cannot be used to perform the stabbing function. Therefore, a stabbing apparatus such as the one in *McArthur* is still required to initially align and stab in the pipe before the tong assembly of *Kelly* can be used to connect the pipe to the pipe in the wellbore. Moreover, neither reference discloses or suggests a "combined step." To the contrary, both references disclose at least a two step process to connect the pipes. *McArthur* discloses that (1) the stabbing apparatus is used to stab in the pipe and (2) the wrenching apparatus is used to connect the pipes. Similarly, *Kelly* discloses that (1) the pipe is stabbed in and then (2) the tong assembly is elevated to a position engageable with the pipe. Each step requires a different apparatus. *McArthur* stabilizes up top while the wrenching apparatus of *Kelly* is on the floor, *i.e.*, different locations for different functions. Therefore, the references, either alone or in combination, do not support the Examiner's motivation to combine the references.

The Examiner has merely used hindsight based on the Applicant's disclosure to piece together various prior art in order to render the Applicant's claimed invention obvious. In response to the hindsight argument, the Examiner further asserts that combining the references to eliminate the separate wrenching apparatus "would not only reduce the equipment necessary to make up and break down pipes but would also reduce the operators needed on the rig floor. The Examiner's stated motivation must fail for three reasons. First, as discussed above, both references teach performing the stabbing step and the connecting step using two different pieces of equipment. Thus, the references, as combined by the Examiner, would not reduce the number of equipments necessary. Second, both references teach applying the torque to connect the pipes from a located proximate the pipe threads, *e.g.*, on the rig floor. Thus, although the combination may eliminate the operator, that operator is merely replaced by a separate wrenching apparatus located on the rig floor, not a tong positioning

apparatus located on the drilling tower. Finally, the desirability of placing the *Kelly* tong at the end of *McArthur*'s stabbing apparatus was not obvious to *McArthur*. The *McArthur* patent issued more than twelve years after the *Kelly* patent. Nevertheless, *McArthur* taught connecting the pipes using an operator located on the rig floor equipped with a separate wrenching apparatus. Because the Examiner's stated motivation is illusory, the Examiner has failed to carry his burden of establishing a prima facie case of obviousness.

Therefore, the references, neither alone nor in combination, teach, show, or suggest an apparatus for positioning a tong having an extendable structure, the tong attached to one end of the extendable structure and a mounting assembly coupled to an opposite end of the extendable structure, wherein the mounting assembly is coupled to a support member on a drilling tower, as recited in claim 1.

Also, the references, neither alone nor in combination, teach, show, or suggest an apparatus for positioning a tong having an extendable structure, the extendable structure having a variable length and the tong capable of making up or breaking out tubulars attached to one end of the extendable structure and a mounting assembly for coupling the extendable structure to at most one location on a drilling tower, as recited in claim 50.

Further, the references, neither alone nor in combination, teach, show, or suggest providing an apparatus for connecting the tubulars, the apparatus comprising a tong adapted to connect the tubulars, a mounting assembly having a bearer adapted to couple the apparatus to a single location on a drilling tower, and an extendable structure for positioning the tong; and positioning the apparatus on a drilling tower, as recited in claim 70.

Further, the references, neither alone nor in combination, teach, show, or suggest an extendable structure, the extendable structure having a variable length and the tong for making up or breaking out tubulars attached to one end of the extendable structure and a mounting assembly coupled to an opposite end of the extendable structure, wherein the mounting assembly is adapted to couple the extendable structure to a support beam disposed above a rig floor, as recited in claim 76. Further, the

references, neither alone nor in combination, teach, show, or suggest the support beam is selectively attached to a drilling tower, as recited in claim 77. Further still, the references, neither alone nor in combination, teach, show, or suggest the support beam is located between 2 meters and 3 meters above the rig floor, as recited in claim 80.

Withdrawal of the rejection is respectfully requested.

II. The Examiner erred in rejecting claims 6, 7, 16, 17, and 20 under 35 USC § 103(a) as being unpatentable over *McArthur* in view of *Kelly* as applied to claims 5 and 15 above, and further in view of *Swoboda, Jr.*

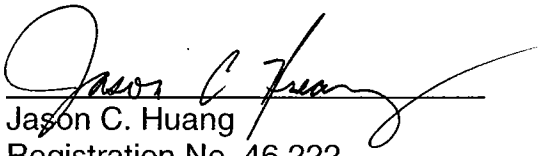
Claims 6, 7, 16, 17, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatetable over *McArthur* in view of *Kelly* as applied to claims 5 and 15 above, and further in view of *Swoboda, Jr.* In rejecting claims 6, 7, 16, 17, and 20, the Examiner incorporated the arguments presented above with respect to *McArthur* in view of *Kelly.*

As described above, Appellants believe that the rejection of the claims with respect to *McArthur* in view of *Kelly* has been overcome. Accordingly, the combination of *McArthur* in view of *Kelly* and further in view of *Swoboda, Jr.* does not teach, show, or suggest the claimed subject matter. Therefore, the claims are believed to be allowable, and Applicant respectfully requests withdrawal of the rejection.

CONCLUSION

The Examiner errs in rejecting pending claims 1-24, 50-55, 57, 60, 61, 70-82, and 94-99 as described above. Accordingly, withdrawal of the rejection and allowance of all claims is respectfully requested.

Respectfully submitted,



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CLAIMS APPENDIX

1. (Previously Presented) An apparatus for positioning a tong proximate a tubular at a well center, comprising:

an extendable structure, the tong attached to one end of the extendable structure;

an actuating member for extending or retracting the extendable structure relative to the well center, the extendable structure and the actuating member having substantially parallel longitudinal axes; and

a mounting assembly coupled to an opposite end of the extendable structure, wherein the mounting assembly includes a bearer and the bearer is coupled to a single location of a support member on a drilling tower.

2. (Original) The apparatus of claim 1, wherein the extendable structure is telescopic.

3. (Original) The apparatus of claim 2, wherein the extendable structure is pivotable about a vertical axis.

4. (Original) The apparatus of claim 2, wherein the extendable structure is pivotable about a horizontal axis.

5. (Original) The apparatus of claim 2, wherein the telescopically extendable structure comprises an outer barrel and an inner barrel.

6. (Original) The apparatus of claim 5, wherein the telescopically extendable structure further comprises an intermediate barrel.

7. (Original) The apparatus of claim 6, wherein at least a portion of the inner barrel is slidably mounted in the intermediate barrel and at least a portion of the intermediate barrel is slidably mounted in the outer barrel.

8. (Previously Presented) The apparatus of claim 5, wherein the mounting assembly further comprises:

a carriage pivotally attached to the bearer, wherein a portion of the outer barrel is disposed on the carriage.

9. (Original) The apparatus of claim 8, wherein the tong is movably attached to the inner barrel.

10. (Original) The apparatus of claim 9, further comprising a clamp assembly for securing the outer barrel to the carriage.

11. (Original) The apparatus of claim 10, wherein the outer barrel is movable between a first position and a second position relative to the carriage.

12. (Previously Presented) The apparatus of claim 1, wherein the mounting assembly further comprises:

a carriage pivotally attached to the bearer, wherein a portion of the outer barrel is disposed on the carriage.

13. (Original) The apparatus of claim 12, further comprising a clamping assembly for securing the extendable structure to the carriage.

14. (Original) The apparatus of claim 13, wherein the clamping assembly is releasable connected to the carriage.

15. (Original) The apparatus of claim 14, wherein the extendable structure comprises an outer barrel and an inner barrel.

16. (Original) The apparatus of claim 15, wherein the extendable structure further comprises an intermediate barrel.

17. (Original) The apparatus of claim 16, wherein at least a portion of the inner barrel is slidably mounted in the intermediate barrel and at least a portion of the intermediate barrel is slidably mounted in the outer barrel.

18. (Original) The apparatus of claim 14, wherein the extendable structure is pivotable about a vertical axis.

19. (Original) The apparatus of claim 14, wherein the extendable structure is pivotable about a horizontal axis.

20. (Original) The apparatus of claim 1, further comprising a motor actuable to adjust the position of the extendable structure with respect to said mounting assembly.

21. (Previously Presented) The apparatus of claim 1, wherein the actuating member comprises a piston and cylinder assembly.

22. (Original) The apparatus of claim 21, wherein the piston and cylinder assembly is at least partially disposed on the extendable structure.

23. (Original) The apparatus of claim 21, wherein the piston and cylinder assembly is used to move the extendable structure horizontally.

24. (Original) The apparatus of claim 1, wherein the tong is movably attached to the extendable structure.

25-49. Cancelled.

50. (Previously Presented) An apparatus for positioning a tong for making up or breaking out tubulars, comprising:

an extendable structure, the extendable structure having a variable length and the tong capable of making up or breaking out tubulars attached to one end of the extendable structure;

a motive assembly having an extendable member for changing the length of the extendable structure; and

a mounting assembly for coupling the extendable structure to at most one location on a drilling tower.

51. (Previously Presented) The apparatus of claim 50, wherein the tong is movably attached.

52. (Previously Presented) The apparatus of claim 50, wherein the motive assembly comprise a piston and cylinder assembly.

53. (Previously Presented) The apparatus of claim 50, wherein the extendable structure is movable in at least two planes.

54. (Previously Presented) The apparatus of claim 89, wherein the extendable structure is slidable along the mounting assembly between a first position and a second position.

55. (Previously Presented) The apparatus of claim 54, wherein the extendable structure is movable in at least two planes.

56. Cancelled.

57. (Previously Presented) The apparatus of claim 50, wherein the extendable structure is telescopic.

58-59. Cancelled.

60. (Previously Presented) The apparatus of claim 1, wherein a center of mass of the tong is substantially aligned with an axis of the extendable structure.

61. (Previously Presented) The apparatus of claim 50, wherein a center of mass of the tong is substantially aligned with an axis of the extendable structure.

62-69. Cancelled.

70. (Previously Presented) A method for connecting a first tubular to a second tubular proximate a well center, comprising:

providing an apparatus for connecting the tubulars, the apparatus comprising:

a tong adapted to connect the tubulars;

an extendable structure for positioning the tong;

an extendable actuating member for extending or retracting the extendable structure; and

a mounting assembly having a bearer adapted to couple the apparatus to a single location on a drilling tower;

positioning the apparatus on a drilling tower;

actuating the extendable structure to move the tong toward the well center;

engaging the first and second tubulars with the tong; and

connecting the first tubular to the second tubular.

71. (Previously Presented) The method of claim 70, further comprising attaching a support member on the drilling tower.

72. (Previously Presented) The method of claim 71, wherein the apparatus is coupled to the support member.

73. (Previously Presented) The method of claim 70, wherein connecting the first tubular to the second tubular comprises rotating the first tubular relative to the second tubular.

74. (Previously Presented) The apparatus of claim 1, wherein the mounting assembly is clamped to the support member.

75. (Previously Presented) The apparatus of claim 1, wherein the mounting assembly is selectively attached to the support member.

76. (Previously Presented) An apparatus for positioning a tong for making up or breaking out tubulars, comprising:

an extendable structure, the extendable structure having a variable length and the tong for making up or breaking out tubulars attached to one end of the extendable structure;

a motive assembly for changing the length of the extendable structure, the motive assembly and the extendable structure having substantially parallel axis; and

a mounting assembly coupled to an opposite end of the extendable structure, wherein the mounting assembly is adapted to couple the extendable structure to a single location of a support beam disposed above a rig floor.

77. (Previously Presented) The apparatus of claim 76, wherein the support beam is selectively attached to a drilling tower.

78. (Previously Presented) The apparatus of claim 76, wherein the mounting assembly is clamped to the support beam.

79. (Previously Presented) The apparatus of claim 76, wherein the support beam is a convenient beam support.

80. (Previously Presented) The apparatus of claim 76, wherein the support beam is located between 2 meters and 3 meters above the rig floor

81. (Previously Presented) The apparatus of claim 76, wherein the tong is movably attached.

82. (Previously Presented) The apparatus of claim 76, wherein the motive assembly comprise a piston and cylinder assembly.

83. – 93. Cancelled.

94. (Previously Presented) The apparatus of claim 1, wherein the support member is a beam of the drilling tower.

95. (Previously Presented) The apparatus of claim 7, wherein a first end of the actuating member is coupled to the outer barrel and a second end is coupled to the inner barrel.

96. (Previously Presented) The apparatus of claim 50, wherein the single location is a location on a support beam.

97. (Previously Presented) The apparatus of claim 96, wherein the extendable structure is clamped to the support beam.

98. (Previously Presented) The apparatus of claim 97, wherein the extendable structure is clamped using at least one bolt.

99. (Previously Presented) The method of claim 70, wherein actuating the extendable structure comprises extending the actuating member, thereby extending the extendable structure.

EVIDENCE APPENDIX

No evidence is submitted.

RELATED PROCEEDINGS APPENDIX

None.